SCIENCE

The limits of the Earth Summit

IVE years ago, the governments of the world congratulated themselves on the great steps they had made towards saving the environment. They had agreed targets for cutting carbon dioxide (CO₂) emissions, reducing the loss of the world's forests, protecting the resources of the oceans, helping provide safe drinking water, protecting the diversity of life, and tackling world poverty, in particular by increasing aid for the poorest countries.

The Earth Summit held in New York last month met in the knowledge that each promise had been broken: it ended without significant agreement to start putting this right. Here are some of the details of the failure to protect the environment.

Forests

TROPICAL forests were lost at the rate of about 32 million acres (12.6 million hectares) per year in the 1990s. Since the Rio Summit, 4% of the tropical forests have been cut down. This was virtually the same rate as in the 1980s. This did not include forests subjected to selective logging which can be almost as destructive in terms of damage to habitats. Friends of the Earth (FoE) estimate that around fifty plant and animal species are being lost per day.

Forest cover seems to have increased slightly in the industrialised countries but this is probably due to commercial planting where one species of tree predominates, creating a rather impoverished environment.

Biodiversity

THERE is a great uncertainty in the amount of biodiversity at present: species of plants and animals so far identified amount to some 1.8 million with estimates of total species ranging from 3 to 30 million. Perhaps two thirds of these live in tropical forests. Of the larger animals, such as birds and mammals, which are more noticeable to people, the "natural" rate of extinction is between 1 every hundred and 1 every thousand years. However, over the last 400 years, 58 mammal and 115 bird species are known to have become extinct. Many others are effectively extinct, surviving only in protected pockets or in zoos, highly inbred and vulnerable to disease. The high rate of loss is firmly linked to destruction of habitats, including swamps, wetlands, and coastal systems as well as forests.

Human food sources are also experiencing a loss of diversity. Since 1900, 75% of the world's crop varieties have disappeared. When the world's population gets 90% of its calories from just 20 crop species (50% from rice, maize, wheat and potatoes) the reduction in varieties renders them much more vulnerable to crop diseases and makes growers more dependent on standardised seeds from companies and on chemical pesticides to protect them.

Aid

IN 1992 the developed countries reaffirmed their commitment to reaching the United Nations aid target of 0.7% of GNP. It was estimated that it would cost some \$600 billion to implement Earth Summit commitments and goals in developing countries. In 1992, foreign aid totalled about \$60 billion, an average of 0.35% of the GNPs of the developed countries. Even if this all went on Earth Summit projects, it would take ten years to implement them. However, the level of aid has dropped since 1992, reaching 0.27% of GNPs in 1995, rather than risen. The USA gives only 0.1% of GNP, lower than all other industrialised countries and lower in absolute amount than Japan, France and Germany. Britain's "aid", 0.28% of GNP, includes grants to Malaysia for the Pergau dam, which does not benefit the environment, and to the repressive regime of Indonesia, a country which many believe does not need any foreign aid.

The European Union has funded ill-conceived schemes in Uganda and Ethiopia which will harm local populations. In Uganda, 35,000 people were expelled from the Kibale forest region with extreme brutality as part of a scheme to "protect" the forest and encourage tourism. In Ethiopia, 7,000 are to be expelled from national parks for similar reasons.

Global warming

THIS is perhaps the most obvious failure of the Rio and New York summits. Developed countries agreed to return CO_2 emissions to the 1990 level by 2000, a modest target, it has to be said. However, CO_2 emissions in 1996 were the highest ever, 2.8% higher than the previous year. It is estimated that CO_2 levels in the atmosphere are the highest for 150,000 years,

nearly one fifth higher than at the start at the industrial revolution. While it is still too early to say that global warming has started to occur, the vast majority of the world's climate scientists agree to this effect: it is interesting that the 1990s are on course to be the warmest decade on record.

The EU is on course to miss its agreed target by 6%; the USA, which gives out nearly a quarter of global CO2, increased its output by 8% between 1990 and 1996. At the summit last month, the USA failed to make any commitment to reduce its emissions. This was rightly criticised by Prime Minister Blair, though his claim for Britain's virtue in this matter is somewhat disingenuous. Of those few countries which were able to claim a reduction in CO2 emissions, the UK and Germany were able to achieve this only by closing down a large number of power stations and factories that used to burn coal (with an accompanying increase in unemployment).

Whether Britain's policies will improve in future remains to be seen. It was a notable success of Labour's environmental section, the Socialist Environment and Resources Association, to recruit several dozen MPs and MEPs before the last election, including several ministers. One of these, Foreign Secretary Robin Cook, has argued strongly that a reduction in CO2 emissions should be achieved by increasing energy efficiency. This would include a programme of energy conservation in homes and increasing public transport. Overseas Development Minister Clare Short has announced that future aid will be aimed at helping provide primary education, basic health care and clean water supplies. The decline in aid levels under the Conservatives, from 0.51% to 0.27% of GNP between 1979 and 1996 would be reversed. Furthermore aid would not be tied to the purchase of goods and services from UK firms, a form of hidden subsidy by British taxpayers. By itself, one country cannot do much. However, Labour Britain has the chance to influence the European Union, which itself could put great pressure on the USA. This would require rather more radicalism than is promised by Thatcherism with a human

Les Hearn